ABSTRACT

Herein is disclosed an oxygen scavenging composition, comprising (i) an oxygen scavenging polymer comprising structure I:

(I) $\left(X-R-X-O-CH_2-Ar-CH_2-O \right)$,

wherein -R- is selected from the group consisting of C_1-C_{24} alkyl, C_1-C_{24} substituted alkyl, C_6-C_{24} aryl, and C_6-C_{24} substituted aryl; -Ar- is selected from the group consisting of C_6-C_{24} aryl and C_6-C_{24} substituted aryl; and -X- is selected from the group consisting of null and -C(=O)-; (ii) a transition metal oxidation catalyst; and (iii) an energy-absorbing compound selected from the group consisting of microwave reactive materials and photoinitiators having a wavelength of maximum absorption of electromagnetic radiation from about 200 nm to about 750 nm. The oxygen scavenging composition can be used to form an oxygen barrier packaging article.